

## Claims

- [c1] An isolated nucleic acid having at least 80% nucleic acid sequence identity to:
- (a) a nucleic acid sequence encoding the polypeptide shown in Figure 38 (SEQ ID NO:38);
  - (b) a nucleic acid sequence encoding the polypeptide shown in Figure 38 (SEQ ID NO:38), lacking its associated signal peptide;
  - (c) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 38 (SEQ ID NO:38);
  - (d) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 38 (SEQ ID NO:38), lacking its associated signal peptide;
  - (e) the nucleic acid sequence shown in Figure 37 (SEQ ID NO:37);
  - (f) the full-length coding sequence of the nucleic acid sequence shown in Figure 37 (SEQ ID NO:37); or
  - (g) the full-length coding sequence of the cDNA deposited under ATCC accession number 203133.

- [c2] The isolated nucleic acid of Claim 1 having at least 85% nucleic acid sequence identity to:
- (a) a nucleic acid sequence encoding the polypeptide shown in Figure 38 (SEQ ID NO:38);
  - (b) a nucleic acid sequence encoding the polypeptide shown in Figure 38 (SEQ ID NO:38), lacking its associated signal peptide;
  - (c) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 38 (SEQ ID NO:38);
  - (d) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 38 (SEQ ID NO:38), lacking its associated signal peptide;
  - (e) the nucleic acid sequence shown in Figure 37 (SEQ ID NO:37);
  - (f) the full-length coding sequence of the nucleic acid sequence shown in Figure 37 (SEQ ID NO:37); or
  - (g) the full-length coding sequence of the cDNA deposited under ATCC accession number 203133.

- [c3] The isolated nucleic acid of Claim 1 having at least 90% nucleic acid sequence identity to:

(a) a nucleic acid sequence encoding the polypeptide shown in Figure 38 (SEQ ID NO:38);

(b) a nucleic acid sequence encoding the polypeptide shown in Figure 38 (SEQ ID NO:38), lacking its associated signal peptide;

(c) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 38 (SEQ ID NO:38);

(d) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 38 (SEQ ID NO:38), lacking its associated signal peptide;

(e) the nucleic acid sequence shown in Figure 37 (SEQ ID NO:37);

(f) the full-length coding sequence of the nucleic acid sequence shown in Figure 37 (SEQ ID NO:37); or

(g) the full-length coding sequence of the cDNA deposited under ATCC accession number 203133.

[c4]

The isolated nucleic acid of Claim 1 having at least 95% nucleic acid sequence identity to:

(a) a nucleic acid sequence encoding the polypeptide shown in Figure 38 (SEQ ID NO:38);

(b) a nucleic acid sequence encoding the polypeptide shown in Figure 38 (SEQ ID NO:38), lacking its associated signal peptide;

(c) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 38 (SEQ ID NO:38);

(d) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 38 (SEQ ID NO:38), lacking its associated signal peptide;

(e) the nucleic acid sequence shown in Figure 37 (SEQ ID NO:37);

(f) the full-length coding sequence of the nucleic acid sequence shown in Figure 37 (SEQ ID NO:37); or

(g) the full-length coding sequence of the cDNA deposited under ATCC accession number 203133.

[c5]

The isolated nucleic acid of Claim 1 having at least 99% nucleic acid sequence identity to:

(a) a nucleic acid sequence encoding the polypeptide shown in Figure 38 (SEQ ID NO:38);

- (b) a nucleic acid sequence encoding the polypeptide shown in Figure 38 (SEQ ID NO:38), lacking its associated signal peptide;
- (c) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 38 (SEQ ID NO:38);
- (d) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 38 (SEQ ID NO:38), lacking its associated signal peptide;
- (e) the nucleic acid sequence shown in Figure 37 (SEQ ID NO:37);
- (f) the full-length coding sequence of the nucleic acid sequence shown in Figure 37 (SEQ ID NO:37); or
- (g) the full-length coding sequence of the cDNA deposited under ATCC accession number 203133.

[c6]

An isolated nucleic acid comprising:

- (a) a nucleic acid sequence encoding the polypeptide shown in Figure 38 (SEQ ID NO:38);
- (b) a nucleic acid sequence encoding the polypeptide shown in Figure 38 (SEQ ID NO:38), lacking its associated signal peptide;
- (c) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 38 (SEQ ID NO:38);
- (d) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 38 (SEQ ID NO:38), lacking its associated signal peptide;
- (e) the nucleic acid sequence shown in Figure 37 (SEQ ID NO:37);
- (f) the full-length coding sequence of the nucleic acid sequence shown in Figure 37 (SEQ ID NO:37); or
- (g) the full-length coding sequence of the cDNA deposited under ATCC accession number 203133.

[c7]

The isolated nucleic acid of Claim 6 comprising a nucleic acid sequence encoding the polypeptide shown in Figure 38 (SEQ ID NO:38).

[c8]

The isolated nucleic acid of Claim 6 comprising a nucleic acid sequence encoding the polypeptide shown in Figure 38 (SEQ ID NO:38), lacking its associated signal peptide.

[c9]

The isolated nucleic acid of Claim 6 comprising a nucleic acid sequence

encoding the extracellular domain of the polypeptide shown in Figure 38 (SEQ ID NO:38).

[c10] The isolated nucleic acid of Claim 6 comprising a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 38 (SEQ ID NO:38), lacking its associated signal peptide.

[c11] The isolated nucleic acid of Claim 6 comprising the nucleic acid sequence shown in Figure 37 (SEQ ID NO:37).

[c12] The isolated nucleic acid of Claim 6 comprising the full-length coding sequence of the nucleic acid sequence shown in Figure 37 (SEQ ID NO:37).

[c13] The isolated nucleic acid of Claim 6 comprising the full-length coding sequence of the cDNA deposited under ATCC accession number 203133.

[c14] An isolated nucleic acid that hybridizes to:

- (a) a nucleic acid sequence encoding the polypeptide shown in Figure 38 (SEQ ID NO:38);
- (b) a nucleic acid sequence encoding the polypeptide shown in Figure 38 (SEQ ID NO:38), lacking its associated signal peptide;
- (c) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 38 (SEQ ID NO:38);
- (d) a nucleic acid sequence encoding the extracellular domain of the polypeptide shown in Figure 38 (SEQ ID NO:38), lacking its associated signal peptide;
- (e) the nucleic acid sequence shown in Figure 37 (SEQ ID NO:37);
- (f) the full-length coding sequence of the nucleic acid sequence shown in Figure 37 (SEQ ID NO:37); or
- (g) the full-length coding sequence of the cDNA deposited under ATCC accession number 203133.

[c15] The isolated nucleic acid of Claim 14, wherein said hybridization occurs under stringent conditions.

[c16] The isolated nucleic acid of Claim 14 which is at least 10 nucleotides in length.

[c17] A vector comprising the nucleic acid of Claim 1.

- [c18] The vector of Claim 17, wherein said nucleic acid is operably linked to control sequences recognized by a host cell transformed with the vector.
- [c19] A host cell comprising the vector of Claim 17.
- [c20] The host cell of Claim 19, wherein said cell is a CHO cell, an *E. coli* or a yeast cell.

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